an affidavit, in order to vote. Finally, Section 302 of HAVA requires that an individual who fails to meet the identification requirements of voting can still vote using a provisional ballot.[59]

The key aspects of this brief overview of identification requirements of voting is that there is a lot of variability by states as to what is required, and not all identification requirements are created equal. By that we mean that required identification documentation for one state may not meet the identity requirements in another state. This is just one of the reasons that it is particularly difficult to study the effect of such laws on voter turnout.

THE DATA

In order to analyze individual voter turnout, this study uses data from the U.S. Census Bureau's Current Population Survey, November 2004: Voting and Registration Supplement File.[60] The November 2004 CPS voting supplement contains interviews from about 57,000 households. Based on self-described registered voters, the data allow us to model the decision to vote based on individual and household characteristics.

Dependent Variable. The dependent variable is whether or not the respondent reported that he or she voted in the November 2004 election. Respondents who admitted to not being registered voters were omitted, along with those reporting that they were not United States citizens. We also omitted those reported to be voting through absentee ballots.[61]

According to the U.S. Census Bureau's analysis of the November 2004 CPS data, 89 percent of registered voters voted in the November 2004 election.[62] This estimate is drawn from a sample of respondents reporting to be registered voters and is much higher than estimates based on samples of the voting-age population. However, the EAC estimates that 70.4 percent of registered voters turned out to vote.[63] The CPS estimate of 89 percent may be biased upward because it is based on the reported vote, which may be overstated because survey respondents may be disinclined to admit that they did not vote.[64] When turnout is based on the total population over 18 years old, 55.8 percent of persons over age 18 voted.[65]

Voter Identification Requirements. The voter identification requirements included in the analysis capture the degree to which a registered voter has to prove his or her identity at the polling station. Two sets of five dichotomous voter identification variables are used in the analysis. The first set is based on the maximum amount of identification that the voter is required to produce in order to prove his or her identity. The maximum state voter identification requirements are broken down into the following classification: state name, sign name, match signature, provide non-photo identification, and provide photo identification. Table 1 presents the voter identification classifications by state used by the Eagleton Institute and the Moritz College of Law at Ohio State University.

For all but two of the states, Illinois and Arizona, we used the classifications that were provided to us by the Eagleton Institute. We recoded these two states because upon researching state election laws, we discovered that the Eagleton Institute had erroneously reported the identification requirements for these two states. The Eagleton Institute study has Illinois listed as a "state name" state. In actuality, Illinois poll workers match a prospective voter's signature to a signature already on file, making Illinois a "match signature" state.[66]

The Eagleton Institute has Arizona listed as a "provide ID" state although Arizona was a "sign

59. Public Law 107-252.

60. Current Population Survey, November 2004: Voting and Registration Supplement.

61. To account for Oregon's elections that are conducted entirely through mail, Oregon voters are treated in this analysis as if they vote in person in the polling both. Oregon is classified as a signature match state for voter identification purposes.

62. U.S. Census Bureau, "U.S. Voter Turnout Up in 2004, Census Bureau Reports," press release, May 26, 2004, at *www.census.gov/Press-Release/www/releases/archives/voting/004986.html* (July 2, 2007).

63. Kimball W. Brace and Michael P. McDonald, *Final Report of the 2004 Election Day Survey*, U.S. Election Assistance Commission, September 27, 2005, at *www.eac.gov/election_survey_2004/pdf/EDS-Full_Report_wTables.pdf* (July 5, 2007).

64. William H. Flanigan and Nancy H. Zingale, *Political Behavior of the American Electorate*, 11th edition (Washington, D.C.: CQ Press, 2006).

65. Brace and McDonald, *Final Report of the 2004 Election Day Survey*.

Table 1 CDA 07-04

Maximum and Minimum Voter Identification Requirements, November 2004 Election

State	Eagelton Institute Maximum Requirement	Corrected Maximum Requirement	Eagelton Institute Minimum Requirement
Alabama	Provide non-photo ID	Provide non-photo ID	Provide non-photo ID
Alaska	Provide non-photo ID	Provide non-photo ID	Provide non-photo ID
Arizona	Provide non-photo ID	Sign name	Provide non-photo ID
Arkansas	Provide non-photo ID	Provide non-photo ID	State name
California	Sign name	Sign name	Sign name
Colorado	Provide non-photo ID	Provide non-photo ID	Provide non-photo ID
Connecticut	Provide non-photo ID	Provide non-photo ID	Provide non-photo ID
Delaware	Provide non-photo ID	Provide non-photo ID	State name
District of Columbia	Sign name	Sign name	Sign name
Florida	Provide photo ID	Provide photo ID	Swear affidavit
Georgia	Provide non-photo ID	Provide non-photo ID	Provide non-photo ID
Hawaii	Provide photo ID	Provide photo ID	Provide non-photo ID
Idaho	Sign name	Sign name	Sign name
Illinois	State name	Match signature	State name
Indiana	Sign name	Sign name	Swear affidavit
Iowa	Sign name	Sign name	Sign name
Kansas	Sign name	Sign name	Sign name
Kentucky	Provide non-photo ID	Provide non-photo ID	Provide non-photo ID
Louisiana	Provide photo ID	Provide photo ID	Swear affidavit
Maine	State name	State name	State name
Maryland	Sign name	Sign name	Sign name
Massachusetts	State name	State name	State name
Michigan	Sign name	Sign name	Sign name
Minnesota	Sign name	Sign name	Sign name
Mississippi	Sign name	Sign name	Sign name
Missouri	Provide non-photo ID	Provide non-photo ID	Provide non-photo ID
Montana	Provide non-photo ID	Provide non-photo ID	Provide non-photo ID
Nebraska	Sign name	Sign name	Sign name
Nevada	Match signature	Match signature	Match signature
New Hampshire	State name	State name	State name
New Jersey	Match signature	Match signature	Match signature
New Mexico	Sign name	Sign name	Sign name
New York	Match signature	Match signature	Sign name
North Carolina	State name	State name	State name
North Dakota	Provide non-photo ID	Provide non-photo ID	Swear affidavit
Ohio	Match signature	Match signature	Match signature
Oklahoma	Sign name	Sign name	Sign name
Oregon	Match signature	Match signature	Match signature
Pennsylvania	Match signature	Match signature	Match signature
Rhode Island	State name	State name	State name
South Carolina	Provide photo ID	Provide photo ID	Provide non-photo ID
South Dakota	Provide photo ID	Provide photo ID	Provide non-photo ID
Tennessee	Provide non-photo ID	Provide non-photo ID	Match signature
Texas	Provide non-photo ID	Provide non-photo ID	Provide non-photo ID
Utah	State name	State name	State name
Vermont	State name	State name	State name
Virginia	Provide non-photo ID	Provide non-photo ID	Provide non-photo ID
Washington	Sign name	Sign name	Sign name
West Virginia	Match signature	Match signature	Sign name
Wisconsin	State name	State name	State name
Wyoming	State name	State name	State name

Sources: Eagleton Institute of Politics, Rutgers, State University of New Jersey, and Moritz College of Law, Ohio State University, *Report to the U.S. Election Assistance Commission on Best Practices to Improve Voter Identification Requirements Pursuant to the Help America Vote Act Of 2002*, June 28, 2006, at *www.eac.gov/docs/VoterIDReport%20062806.pdf* (July 30, 2007), and author's personal communication with Timothy Vercellotti (June 1, 2001).

name" state at the time of the 2004 election.[67] Identification laws did not go into effect in Arizona until some time after the 2004 election. Arizona could not have been a "provide ID" state before the November 2004 election because Arizonans voted on and approved Proposition 200 on the November 2004 ballot. This initiative is the impetus for the requirement that voters show identification before voting as proof of citizenship.[68]

The second set of voter identification variables recognizes that some states allow voters without proper identification to vote after demonstrating their identity through other means. This minimum requirement set of variables includes state name, sign name, match signature, provide non-photo identification, and swear affidavit. For the probit regressions, the variable for voters stating their names for identification is omitted for reference purposes.

Individual Factors. The individual factors included in the analysis capture differences in the race and ethnicity, age, education, household income, marital status, gender, employment status, citizenship, residential mobility, and home ownership of the individual respondents. Controlling for such variables as education and age is important because research indicates that these variables are good predictors of voting turnout.[69] The analysis controls for the effect of the individual's race and ethnicity through a set of mutually exclusive dichotomous variables for the following categories: non-Hispanic white, non-Hispanic African–American, Hispanic, non-Hispanic American Indians, non-Hispanic Asians (including Hawaiians/Pacific Islanders), and other races, including those reporting multiple races and ethnicities. The specification of these variables allows us to compare the voting patterns of minorities to those of whites.

A set of dichotomous variables control for the age of the individual respondents that fall into the following categories: 18- to 24-year-olds, 25- to 44-year-olds, 45- to 64-year-olds, and 65 years and older. For education, the respondents were classified as either having less than a high school diploma, high school diploma or equivalent, some college, bachelor's degree, or a graduate school degree.

For family income, the Eagleton Institute study used an ordinal family income variable as an interval-ratio variable.[70] The family income variable is coded as 1 through 16 with units containing unequal income ranges. For the purposes of this analysis, the effect of family income is controlled for by the inclusion of a series of income range dichotomous variables: under $15,000, $15,000 to $29,999, $30,000 to $49,999, $50,000 to $74,999, $75,000 to $149,999, and $150,000 or more.

To control for the influence of marital status, five dichotomous variables signifying being single, married, separated, divorced, and widowed are included in the model. Single individuals are the default. A dichotomous variable identifying the gender of the individual as a female is also included in the models.

Two dichotomous variables are included to control for the effect of employment. The first is a dichotomous variable signifying whether or not the individual is employed; the second is a dichotomous variable for whether or not the person is in the labor force.

To control for whether native-born citizens are more likely to vote than naturalized citizens, a dichotomous variable identifying native-born citi-

66. Documentation supporting the signature match requirement can be found at the following: ILCS 5/6-66; electionline.org, Election Reform Briefing, April, 2002, p. 12, at *www.electionline.org/Portals/1/Publications/ Voter%20Identification.pdf*; Punchcard Manual of Instructions for Illinois Election Judges, 2005, at *www.elections.il.gov/Downloads/ ElectionInformation/ PDF/03selfsec.pdf*; and Election Law @ Moritz, 50 Questions for 5 States, Illinois, last updated 1/19/07, at *moritzlaw.osu.edu/ electionlaw/election06/50-5_Illinois.php#14*.

67. Arizona Secretary of State, 2004 Ballot Propositions, "Instructions to Voters and Election Officers," September, 2004, at *www.azsos.gov/election/2004/Info/PubPamphlet/Sun_Sounds/english/contents.htm*.

68. The text of Proposition 200 is available at *www.pan2004.com/docs/initiative_petition.pdf*.

69. Flanigan and Zingale, *Political Behavior of the American Electorate*.

70. The variable "HUFAMINC" in the November 2005 CPS has the following coding: 1 for less than $5,000; 2 for $5,000 to $7,499; 3 for $7,500 to $9,999; 4 for $10,000 to $12,499; 5 for $12,500 to $14,999; 6 for $15,000 to $19,000; 7 for $20,000 to $24,999; 8 for $25,000 to $29,999; 9 for $30,000 to $34,999; 10 for $35,000 to $39,999; 11 for $40,000 to $49,999; 12 for $50,000 to $59,999; 13 for $60,000 to $74,999; 14 for $75,000 to $99,999; 15 for $100,000 to $149,999; and 16 for $150,000 or more.

zens is included. Two dichotomous variables are included to control for community ties. The models control for whether or not the individual has moved within the last year and whether or not the individual owns or rents his or her home. These two variables are included to help control for social connectedness under the theory that those with stronger community ties will be more likely to vote.

State Political Factors. As with the Eagleton Institute study, two dichotomous variables indicate whether a state is considered a battleground state and a competitive state. A state is designated as a battleground state if the margin of victory for the winning 2004 presidential candidate was 5 percent or less. A state was designated as competitive if the margin of victory for governor and/or U.S. Senate races was 5 percent or less.

FINDINGS

The probit regression analyses that follow examine the effects of voter identification requirements on voter turnout. Table 2 presents the original findings of the Eagleton Institute's probit regression analysis. Table 3 presents the descriptive statistics of the data used in Table 4. Based on our analyses, six sets of probit regression models are presented in Tables 4 to 9.

The first set of probit regressions contains our replication of the Eagleton Institute study for their analysis of all voters (Table 4). The second set of probit regressions presents the findings for all voters under a different model specification and the corrected classification of state identification requirements for Arizona and Illinois (Table 5). The sixth through ninth sets of probit regressions present our findings for the different model specification and corrected coding for state identification requirements for whites, African–Americans, Hispanics, and Asians (Tables 6 through 9).

For all of the models, robust standard errors are estimated to correct for correlated error terms within each state. For tests of statistical significance, the standard two-tailed tests are used. See below for a discussion of one-tailed versus two-tailed tests of statistical significance. The calculations in Tables 3 through 9 use the CPS weight, PWSSWGT, as recommended by the Bureau of the Census.

ONE-TAILED VERSUS TWO-TAILED TESTS OF STATISTICAL SIGNIFICANCE

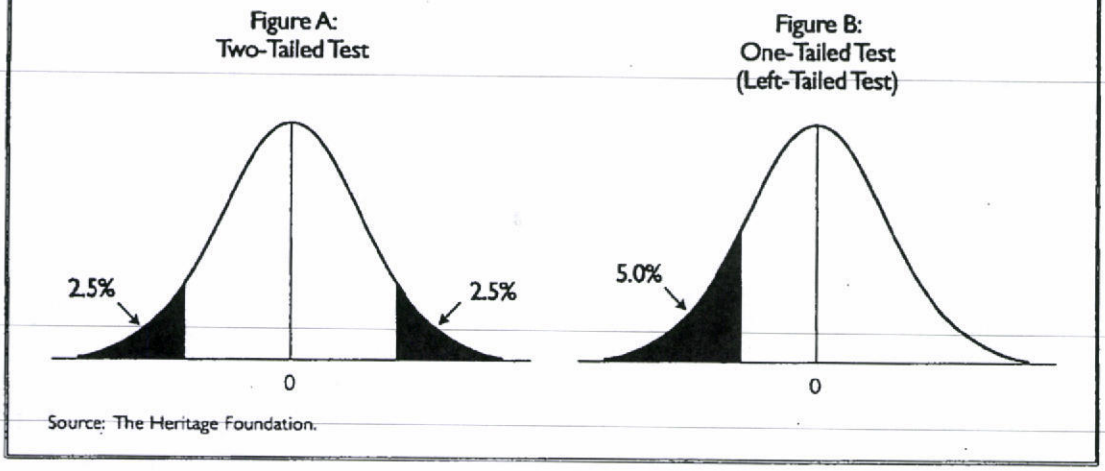
When doing tests of statistical significance for hypotheses, social scientists generally use two-tailed tests. Two-tailed tests are used to check for a difference while ignoring in which direction the difference lies.

For example, a social scientist would use a two-tailed test to determine whether voters in photo identification and give name states have different probabilities of reporting having voted in the 2004 election, regardless of the direction of the relationship. By using a two-tailed test, the 5 percent probability is split between both ends of the bell-shaped curve. (See Figure A in Chart 1.) That is, 2.5 percent of the probability that the difference is due to chance is placed in the side that represents respondents in photo identification states being less likely to vote, while 2.5 percent is placed in the side that represents respondents in photo identification states being more likely to vote. If the probit coefficient for photo identification states falls within either of the 2.5 percent shaded regions, this finding is determined to be statistically significant. If the coefficient falls within the left (right) tail, photo identification requirements have a negative (positive) relationship with reported voter turnout. If the coefficient falls between the 2.5 percent shaded regions, photo identification requirements are said have no relationship with voter turnout.

When one-tailed tests are used, social scientists are hypothesizing that the relationship between photo identification requirements and reported voting has a specific direction: for example, voter identification requirements decrease (increase) reported voting. As determined by the social scientist, all of the 5 percent of chance is placed in one end of the bell-shaped curve. If the direction of the relationship is as hypothesized, placing the entire 5 percent chance in one side makes it is *twice as easy* to achieve a statistically significant finding with a one-tailed test as with a two-tailed test. Figure B in Chart 1 is an example of a one-tailed test where the researcher believes a negative relationship exists. In the case of photo identification requirements and voter turnout, if the coefficient falls within the 5 percent shaded region of the left tail, photo identification requirements would then be said to have a negative relationship. If the coefficient does not fall within the 5 percent region, then photo identifica-

Chart 1 CDA 07-04

Two-Tailed Versus One-Tailed Hyphothesis Tests



Source: The Heritage Foundation.

tion requirements are said to have no relationship with voter turnout.

According to norms of the social sciences, researchers generally use two-tailed tests. When they deviate from this norm, social scientists generally provide a justification for why they have done so. Consumers of statistical research should be skeptical of findings based on one-tailed tests, especially when such findings do not hold up under two-tailed testing.

Replicating the Eagleton Institute's Findings for All Voters

Table 2 contains the findings from the Eagleton Institute's probit regression for all registered voters as presented in their paper. Table 3 presents the findings from our attempt to replicate the Eagleton Institute study findings for all voters. In our attempt at replicating the Eagleton Institute's study, we could not entirely match the same number of respondents. The Eagleton Institute's probit regression of all voters is based on 54,973 respondents.[71] Our best attempt at replicating their analysis produced 54,829 respondents—144 fewer respondents. In addition, the results reported in Table 3 use the more commonly accepted two-tailed significance tests.

While the Eagleton Institute reported that states with sign name, non-photo identification, and photo identification requirements have lower voter turnout than states with only the state name requirement, only the photo identification coefficient in our attempt at replication (Model 1) is statistically significant at the 95 percent confidence level. Respondents from photo identification states are less likely to have reported voting compared to respondents in states that only required voters to say their names at the polling stations. The magnitude of the negative relationship between photo identification requirements and voter turnout is difficult to interpret with probit coefficients, so the elasticity was calculated. The elasticity figures used in this analysis represent the percentage change in the probability of reporting to vote given a one-unit change in a particular dichotomous independent variable. The survey respondents in photo identification states are 0.002 percent less likely to report voting than respondents from states that only required voters to give their name for identification.

Model 2 corrects for the Eagleton Institute study's misclassification of the voter identification requirements in Arizona and Illinois. With the correction, all of the state voter identification variables are statistically insignificant—meaning that none of these requirements has a statistically measurable relationship with voting turnout.

71. Vercellotti and Anderson, "Protecting the Franchise, or Restricting It?" Table 3, p. 23.

Model 3 attempts to replicate the findings of the Eagleton Institute's examination of the effect of minimum requirements. As seen in Table 2, the Eagleton Institute found that the coefficients for sign name, non-photo identification, and swear affidavit states had statistically significant, negative relationships with voter turnout using one-tailed significant tests. However, our analysis presented in Model 3 using two-tailed statistical significance tests finds only the swear affidavit coefficient to be statistically significant at the 95 percent confidence level. The survey respondents in swear affidavit states are 0.002 percent less likely to report voting than respondents from states that only required voters to state their name for identification.

Table 2 CDA 07-04

Copies of Eagleton Institute's Probit Models of Voter Turnout

Variable	Maximum Requirement Coefficient	Maximum Requirement Robust S.E.	Minimum Requirement Coefficient	Minimum Requirement Robust S.E.
Sign name	-0.11*	0.05	-0.08*	0.04
Match signature	-0.04	0.05	-0.03	0.05
Non-photo ID	-0.16**	0.06	-0.15**	0.05
Photo ID	-0.17**	0.07	–	–
Affidavit	–	–	-0.23**	0.06
Hispanic	-0.08	0.05	-0.08	0.05
African–American	0.24**	0.04	0.24**	0.04
Asian American	-0.37**	0.07	-0.38**	0.07
Age 25–44	0.004	0.02	0.003	0.02
Age 45–64	0.26**	0.03	0.26**	0.03
Age 65+	0.43**	0.03	0.43**	0.03
High school	0.31**	0.02	0.31**	0.02
Some college	0.57**	0.03	0.57**	0.03
College	0.88**	0.04	0.88**	0.04
Graduate school	0.98**	0.05	0.98**	0.05
Household income	0.03**	0.003	0.03**	0.003
Married	0.23**	0.02	0.23**	0.02
Female	0.10**	0.01	0.10**	0.01
Battleground state	0.17**	0.04	0.18**	0.04
Competitive race	0.05	0.06	0.05	0.05
Employed	0.05	0.05	0.05	0.05
Member of workforce	-0.05	0.05	-0.05	0.05
Native-born citizen	0.02	0.04	0.02	0.04
Moved within past 6 months	-0.29**	0.03	-0.29**	0.03
Constant	-0.09	0.10	-0.09	0.09
Pseudo R-squared	0.09		0.10	
N	54,973		54,973	

* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Note: One-tailed significance tests were used.

Source: Timothy Vercellotti and David Anderson, "Protecting the Franchise, or Restricting It? The Effects of Voter Identification Requirements on Turnout," American Political Science Association conference paper, Philadelphia, Pa., August 31–September 3, 2006, p. 23, Table 3.

It should be noted that although we ran the minimum identification requirement model using the classifications assigned to the states by the Eagleton Institute study, there are some issues with the states considered to have an affidavit as the minimum requirement. These issues should be addressed in follow-up studies. First, the Eagleton Institute study identified only four states as having a minimum requirement of sign affidavit. They are Florida, Indiana, Louisiana, and North Dakota. All but one of these states, Indiana, require some form of identification as the maximum requested. This puts Indiana in the precarious position of requiring, at a maximum, that a voter sign his name before receiving a ballot; if he is unable to do so, he can sign an affidavit and vote. This does not make sense, because Indiana in 2004 did not require identification before voting (other than for those affected by HAVA requirements).

We believe this to be another classification error on the part of the Eagleton Institute. According to the "2004 Indiana Election Day Handbook," the procedure for signing an affidavit only applies to challenged voters who are then given a provisional ballot if they sign the affidavit.[72] This voting method would not fall under the guidelines set forth by the Eagleton Institute because it applies to provisional, and not regular, ballots.[73] For these reasons, we believe Indiana should have a minimum identification requirement of sign name, the same as its maximum.

Additionally, there are five other states (Connecticut,[74] Delaware,[75] Georgia,[76] South Dakota,[77]

72. Indiana Election Division, "2004 Indiana Election Day Handbook: A Guide for Precinct Election Boards and Poll Workers," December 2003, pp. 13–17.

73. *Report to the U.S. Election Assistance Commission on Best Practices to Improve Voter Identification Requirements Pursuant to the Help America Vote Act of 2002*, p. 8.

Table 3 CDA 07-04

Replicating Vercellotti: Probit Models of Overall Voter Turnout Based on the Eagleton Institute's Specification

	Maximum Requirement				Minimum Requirement	
	Model 1 Replication		Model 2 Recoded States		Model 3 Replication	
Variable	Coefficient	Robust S.E.	Coefficient	Robust S.E.	Coefficient	Robust S.E.
Sign name	-0.08	0.04	-0.06	0.06	-0.03	0.05
Match signature	-0.01	0.05	0.01	0.06	-0.02	0.07
Non-photo ID	-0.10	0.06	-0.10	0.07	-0.08	0.06
Photo ID	-0.10*	0.05	-0.10	0.06	–	–
Affidavit	–	–	–	–	-0.10*	0.05
Hispanic	-0.08	0.05	-0.08	0.05	-0.08	0.05
African–American	0.29***	0.04	0.29***	0.05	0.24**	0.05
Asian American	-0.45***	0.07	-0.45***	0.08	-0.46**	0.07
Age 25–44	-0.01	0.02	-0.01	0.03	-0.11	0.03
Age 45–64	0.27***	0.03	0.27***	0.03	0.27***	0.03
Age 65+	0.44***	0.03	0.44***	0.03	0.45***	0.03
High school	0.32***	0.03	0.32***	0.25	0.32***	0.03
Some college	0.611***	0.03	0.61***	0.03	0.61***	0.03
College	0.90***	0.04	0.90***	0.04	0.90***	0.04
Graduate school	1.04***	0.05	1.04***	0.05	1.05***	0.05
Household income	0.04***	0.003	0.04***	0.003	0.04***	0.003
Married	0.21***	0.03	0.21***	0.03	0.21***	0.03
Female	0.10***	0.02	0.10***	0.02	0.10***	0.02
Battleground state	0.20***	0.04	0.20***	0.04	0.21***	0.05
Competitive race	-0.03	0.06	-0.02	0.06	-0.02	0.06
Employed	0.03	0.05	0.03	0.05	0.03	0.05
Member of workforce	0.07	0.06	0.07	0.06	0.07	0.07
Native-born citizen	-0.02	0.05	-0.01	0.05	-0.02	0.05
Moved within past 6 months	-0.36***	0.04	-0.36***	0.04	-0.36***	0.04
Constant	-0.11	0.09	-0.12	0.10	-0.13	0.09
Pseudo R-squared	0.10		0.10		0.10	
N	54,829		54,829		54,829	

* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Note: Two-tailed significance tests were used. Robust standard errors adjusted for state clustering are reported. The CPS population weights were used.

Source: Heritage Foundation calculations.

and Virginia[78]) that require some form of identification but make exceptions and allow voters without the required documentation to sign an affidavit in order to vote. To be classified correctly, these states should also be considered to have a minimum requirement of sign affidavit as they too provide opt outs for voters unable to show appropriate forms of identification.

As for the socioeconomic variables in Models 1 through 3, African–Americans are more likely to have reported voting in the election than a grouping of non-Hispanic whites, American Indians, Hawaiians/Pacific Islanders, and others. In contrast, Asians are less likely to report voting. Respondents aged 45 and above are more likely to report voting than those 18 to 24 years old. Those with an

74. Conn. Gen. Stat. Ann. § 9-261.
75. 15 Del. Code. § 4937.
76. Ga. Code. Ann. § 21-2-417.
77. S.D. Codified Laws § 12-18-6.2.
78. Va. Code. Ann. § 24.2-643.

education at or above a high school diploma are more likely to report voting than those without a high school degree. Family income has a positive relationship with the probability of reporting having voted. Married and female respondents are more likely to report voting than not married and male respondents, respectively. Respondents residing in battleground states are more likely to vote, while respondents who moved within the last six months are less likely to report voting.

Alternative Model Specifications

Concerns regarding some of the variables used in the Eagleton Institute study led us to estimate alternative specifications that use the November 2004 CPS data more appropriately.

First, the Eagleton Institute's race and ethnicity dichotomous variables compare African–Americans, Hispanics, and Asians to the default group of whites, American Indians, Alaskan Natives, Hawaiians/Pacific Islanders, and those reporting to be more than one race and/or ethnicity. For example, the Eagleton Institute found that African–Americans were more likely to report voting compared to whites, American Indians, Alaskan Natives, Hawaiians/Pacific Islanders, and those reporting to be more than one race and/or ethnicity.

The descriptive statistics of the data used for the alternative specifications are presented in Table 4. The analyses in Table 5 control for the effect of the individual's race and ethnicity through a set of mutually exclusive dichotomous variables for the following categories: non-Hispanic whites, non-Hispanic African–Americans, Hispanics, non-Hispanic American Indians and Alaskan Natives, non-Hispanic Asians (including Hawaiians/Pacific Islanders), and other races, including those reporting multiple races and ethnicities. For example, this division of race and ethnic groups allows us to present clearer estimates of how voter identification laws affect the voting probabilities of minorities compared to whites.

Second, the Eagleton Institute study used an ordinal family income variable as an interval-ratio variable. Using categorical variables as interval-ratio variables can lead to estimation problems, so for the purposes of this analysis, the effect of family income is controlled for by the inclusion of a series of income range dichotomous variables.

Table 4 CDA 07-04

Descriptive Statistics

Variable	Mean	Standard Deviation	Minimum	Maximum
Voted	0.87	0.33	0	1
Sign name	0.26	0.44	0	1
Match signature	0.17	0.38	0	1
Non-photo ID	0.26	0.44	0	1
Photo ID	0.09	0.28	0	1
Recoded sign name	0.27	0.44	0	1
Recoded match signature	0.21	0.41	0	1
Recoded non-photo ID	0.25	0.43	0	1
Recoded photo ID	0.09	0.28	0	1
Hispanic	0.05	0.21	0	1
African–American	0.09	0.29	0	1
American Indian	0.01	0.09	0	1
Asian American	0.02	0.14	0	1
Other race	0.02	0.12	0	1
Age 25–44	0.37	0.48	0	1
Age 45–64	0.38	0.48	0	1
Age 65+	0.17	0.37	0	1
High school	0.30	0.46	0	1
Some college	0.31	0.46	0	1
College	0.20	0.40	0	1
Graduate school	0.10	0.31	0	1
Family income, $15,000–$29,999	0.15	0.36	0	1
Family income, $30,000–$49,999	0.22	0.42	0	1
Family income, $50,000–$74,999	0.22	0.42	0	1
Family income, $75,000–$149,999	0.24	0.42	0	1
Family income, $150,000 or more	0.06	0.24	0	1
Married	0.63	0.48	0	1
Widowed	0.06	0.24	0	1
Divorced	0.10	0.30	0	1
Seperated	0.02	0.13	0	1
Female	0.53	0.50	0	1
Battleground state	0.28	0.45	0	1
Competitive race	0.19	0.39	0	1
Employed	0.69	0.46	0	1
Member of workforce	0.72	0.45	0	1
Native-born citizen	0.96	0.20	0	1
Moved within last year	0.13	0.33	0	1
Home ownership	0.80	0.40	0	1

N = 54,695.

Source: Heritage Foundation calculations based on U.S. Census Bureau, Current Population Survey, November 2004: Voting and Registration Supplement, 2005.